U.S. DEPARTMENT OF COMMERCE
National Telecommunications & Information Administration

Evaluation of the
Telecommunications and Information Infrastructure Assistance Program

Case Study Report

Children's Alliance of New Hampshire
SafetyNet-NH
95045

Concord, New Hampshire

Site Visitors: Gary Silverstein and Becky Rak

Dates of Visit: January 21-23, 1998

PREFACE

On behalf of the National Telecommunications and Information (NTIA), I am pleased to share the following report that is one of a series of case studies conducted on grants awarded by the Telecommunications and Information Infrastructure Assistance Program (TIIAP) in 1994 and 1995. The case studies are part of the program's evaluation effort designed to gain knowledge about the effects and lessons of TIIAP-funded projects. NTIA contracted Westat, a research and consulting firm, to perform an independent evaluation of the program's first two years of grants. The evaluation consisted of a mail survey of 206 grant recipient organizations and in-depth case studies of selected projects. In February, 1999, the Commerce Department released Westat's evaluation report.

The projects selected for the case studies cover a broad range of program types and sizes, planning grants as well as demonstration grants, and they show varying degrees of implementation, sustainability, and replication. Westat selected the projects to represent a cross-section of all projects funded in the program's first two years. Specific selection criteria included geographic region, target population, project application area, project category, and size of award. To conduct each case study, Westat reviewed all project files, including progress reports and the final report, and conducted site visits. The site visits consisted of project demonstrations and interviews with project staff, representatives of partner organizations, and project end users.

NTIA thanks the case study participants for their time and their willingness to share not only their successes but their difficulties, too. Most of all, we applaud their pioneering efforts to bring the benefits of advanced telecommunications and information technologies to communities in need. We are excited about the case studies and lessons they contain. It is through the dissemination of these lessons that we extend the benefits of TIIAP-funded projects nationwide.

We hope you find this case study report valuable and encourage you to read other TIIAP case studies. You may obtain additional case studies and other TIIAP publications, including the final Westat evaluation report, through the NTIA web site (www.ntia.doc.gov) or by calling the TIIAP office at (202) 482-2048. We also are interested in your feedback. If you have comments on this case study or suggestions on how TIIAP can better provide information on the results and lessons of its grants, please contact Francine E. Jefferson, Ph.D. at (202) 482-2048 or by email at fjefferson@ntia.doc.gov.

Larry Irving
Assistant Secretary for Communications and Information

TIIAP CASE STUDY

Children's Alliance of New Hampshire
SafetyNet-NH

A. EXECUTIVE SUMMARY

The Children's Alliance of New Hampshire developed the idea to implement a statewide electronic benefits access program to screen clients against federal, state, and local eligibility requirements after conducting a needs assessment that analyzed access to public and private benefits. It applied for and received TIIAP funding in October 1995. The TIIAP grant provided the necessary funds to add legitimacy to the demonstration project and to help attract support, both financial and in-kind, to the project. The demonstration project, named SafetyNet-NH, utilized a screening software package known as the Benefits Outreach Screening System (BOSS) created by United Seniors Health Cooperative (USHC).

This low-cost, dial-up network presented a community-based way to reach underserved populations throughout the State of New Hampshire. Originally, the Children's Alliance planned to install BOSS in 17 sites across the state. This meant selecting sites, evaluating their existing hardware and software, researching eligibility requirements for programs at the state and local levels, training system users, and implementing the program at the selected pilot sites. These tasks were accomplished, with some difficulty, with the assistance of USHC.

The factor that the Children's Alliance had not considered when writing its TIIAP application was the role evolving technology would play in the demonstration project. It quickly became clear to project staff that their DOS-based BOSS program would not be sufficient to develop an electronic, statewide benefits system that was going to aid and encourage cooperation among social service providers as well as meet the wide-ranging needs of individual agencies. This led to the development of a Windows-based version of BOSS known as CROSSCheck. While this new software package greatly expanded the usefulness and life expectancy of the electronic benefits system, it dramatically changed the scope of the demonstration project.

The advent of CROSSCheck combined with the changing welfare environment at the federal and state levels, generated interest in the new BOSS program that extended well beyond the original 17 pilot sites. The Children's Alliance and USHC had to balance statewide demand for the product with trouble-shooting the new system and trying to accomplish the original goals set forth in the TIIAP proposal.

CROSSCheck was not fully operational by the end of the demonstration project. In addition, the Children's Alliance did not meet all of its objectives, such as developing application-generating software. Nonetheless, the demonstration project was a tremendous success in that it exceeded project staff's original expectations. As such, the Children's Alliance's relatively small demonstration project attracted statewide interest faster than the Children's Alliance or USHC anticipated. The focus of the demonstration project gradually changed from one of demonstrating a product at 17 isolated sites to developing a more effective and technologically advanced product for use across the state.

Following the official conclusion of the demonstration project, the Children's Alliance discontinued its active participation in establishing a statewide electronic benefits system. It felt that its role was to demonstrate the potential of such a system and with that successfully completed, it wanted to refocus its energy on the needs of children. The withdrawal of the Children's Alliance, however, did not jeopardize the future of CROSSCheck. Two members of USHC formed a new company to help meet the

demand for the new product. In addition, the project director for the demonstration project left the Children's Alliance to continue working with community-based service agencies interested in using technology to create a more responsive and efficient benefits administration system across the state of New Hampshire.

B. OVERVIEW

Purpose and General Approach

Initially, the Children's Alliance of New Hampshire conducted a needs assessment analyzing low-income families' access to public and private benefits. As a result of this study, the Children's Alliance developed the idea to implement a statewide electronic benefits access program to screen applicants against eligibility requirements for federal, state, and local social service programs. The project, named SafetyNet-NH, utilized a software package developed by United Seniors Health Cooperative (USHC) known as the Benefits Outreach Screening System (BOSS).

An equally important goal was to centralize and simplify the application process to obtain aid. SafetyNet-NH was also proposed as a vehicle to increase client access to available resources and to increase the information available about public and private financial assistance programs. In addition, SafetyNet-NH was designed to become "a network of pilot sites to meet the needs of end-users at isolated community-based outstations" (TIIAP proposal).

This low-cost, dial-up network presented a community-based method for reaching underserved populations. The project targeted low-income children and families, especially those living in rural areas. Outstations and mobile units were included in the project to ensure that New Hampshire's rural population would be served. Attempts were made to establish all sites in places that such families and children already frequented, such as family shelters, Head Start centers, and medical centers.

SafetyNet-NH was planned as a three-phase project. Phase One focused on customizing the BOSS software and implementing the network at seven statewide pilot sites located in more urban areas. It also involved researching eligibility requirements for individual assistance programs and developing client screening rules. Phase Two involved developing application-generating modules at sites already using BOSS and increasing the overall number of pilot sites to 17. This phase of the project placed a strong emphasis on bringing BOSS to isolated communities. Phase Three included the development of additional application generating modules. It also included testing and debugging electronic data transfers with entitlement agencies. The Children's Alliance also hoped to expand the scope of the project and have SafetyNet-NH achieve financial self-sufficiency during this phase.

Phase One was completed as originally planned. Phase Two was also completed, but several modifications were made to the original plan due to rapid advances in technology. For example, the goal of implementing the application generating module was replaced by electronic data transfer. Phase Three was not completed during the demonstration project, but a modified version of the original plan is currently underway.

The technology used in the project was originally designed to accomplish the following:

- Screen low-income children and families to assess their eligibility for several assistance programs.

- Print an eligibility report for each client. The report was to include information about how to contact the program, the documentation required to apply, and when to apply for assistance.

- Generate completed applications and transfer application data to the appropriate agency.

- Scan documents so that they can be sent to the appropriate agency.

- Reduce access barriers and facilitate the application process for public and private assistance programs.

- Connect agencies to one another and reduce the duplication of effort among agencies. Ideally, the agencies would become more effective at a lower cost.

- Develop an online dissemination system to keep all participating agencies up to date and accurate.

- Develop data collection systems with the capability to collect and analyze data for individual sites as well as system-wide.

It should be noted that as the project progressed, SafetyNet-NH expanded its scope well beyond the original 17 pilot sites selected for the demonstration project. Changes in welfare made it essential for social service agencies to cooperate and share resources. BOSS became the standard tool for intake screenings and data sharing among social service providers in New Hampshire. Currently, plans are underway to install a Windows version of BOSS in at least 230 sites across New Hampshire. Each site has an average of 56 programs that need to be included in their customized BOSS programs.

The TIIAP grant was instrumental in bringing BOSS to New Hampshire. Without the Department of Commerce funding, the Children's Alliance would not have had the money to implement BOSS in the initial 17 pilot sites. While the Children's Alliance found it difficult to adhere to its proposed timeline, the scope of the project expanded exponentially and moved from what was a relatively small demonstration to a statewide implementation project.

Description of Grant Recipients and Project Partners

Grant Recipient. The Children's Alliance of New Hampshire is a statewide, independent nonprofit advocacy agency for children. It is committed to addressing the health and well-being of children in low-income families. According to its TIIAP proposal, the Children's Alliance "works in coalition for populations of children who face low income, system inadequacies, family problems, or disabilities." It's mission statement reads, "Every child has a future. Every community has a role."

The Children's Alliance has been involved in a variety of projects to advance the well-being of New Hampshire children and their families. Some of its projects include Access to Care, a public-private partnership for Medicaid outreach that resulted in a 48 percent increase in children's enrollment in the program; Kids Count New Hampshire, a state-by-state report on the condition of children; Partners in Health, a community-based support program for families with chronically ill children; and Healthy Kids Corporation, which pushed health care legislation that resulted in Blue Cross offering low-cost insurance to children.

Within the Children's Alliance of New Hampshire, three staff members played key roles in obtaining, administering, and sustaining the TIIAP grant:

- **President of the Children's Alliance.** Prior to obtaining the TIIAP grant, she worked with the National Association of Child Advocates (NACA) to secure a planning grant from the Annie E. Casey Foundation that was used to conduct an assessment of social services in New Hampshire and a feasibility study of BOSS. She developed the initial budget for the TIIAP grant proposal, but once the grant was awarded, her involvement in the project was relatively minimal. She oversaw project funding and publicity. The latter involved writing press releases, scheduling press conferences, and arranging for key people from Washington, DC, such as U.S. Department of Commerce employees, to appear at the opening of new pilot sites and other major events.

- **Project director.** Prior to assuming this position, the project director was the community outreach coordinator for the Children's Alliance. She wrote the TIIAP grant proposal and was the driving force behind the project's success. Her responsibilities during the demonstration project included making presentations of BOSS to state stakeholders, breaking down barriers and creating an environment of trust between social services providers, establishing and managing the demonstration project oversight committee, acquiring local technical assistance, and convening end user panels. She also researched program descriptions and eligibility guidelines for programs that were included on BOSS, trained staff at the pilot sites, assessed the pilot sites' technical needs and capabilities, assisted the pilot sites in installing and using the system, and served as a liaison between the pilot sites and United Seniors Health Cooperative (USHC), the software developer. In addition, she worked with the pilot sites and other agencies interested in BOSS/CROSSCheck to ensure the continuation of the project beyond the TIIAP grant.

- **Administrative/technical support assistant.** She provided technical support for the demonstration project. She spent approximately 30 to 50 percent of her time providing technical support to the pilot sites, installing software, and solving technical problems.

In general, the role of the Children's Alliance staff was to do the following:

- Generate the involvement of community-based nonprofits and state entities in the project.
- Train software users.
- Provide technical support to the pilot sites.
- Research community-based assistance programs' entitlement guidelines.
- Research state-specific eligibility requirements.
- Provide data on changes in program eligibility requirements for BOSS updates.
- Serve as a liaison between pilot sites and software consultants.
- Make hardware available at the 17 pilot sites.
- Produce regular reports based on the data collected through BOSS screenings.

Project Partners. The Children's Alliance of New Hampshire had multiple project partners during the course of the demonstration project. Project partners and community partners included the following organizations:

- United Seniors Health Cooperative
- Statewide Community Action Programs (CAPs)
- New Hampshire Department of Health and Human Services
- New Hampshire Office of Economic Services
- New Hampshire Department of Employment Security
- NYNEX
- Sanders Lockheed Martin
- New Hampshire Municipal Association
- New Hampshire Developmental Disabilities Council

Many of these organizations contributed either in-kind support or information or feedback that was in some way an integral part of the project. For example, the six statewide Community Action Programs in New Hampshire served as pilot sites for BOSS and contributed to the system design by holding end-user forums. The New Hampshire Office of Economic Services compiled descriptions of the 20 programs they administered and kept information accurate on paper as a way of testing the accuracy of BOSS. The New Hampshire Department of Health and Human Services (HHS) also provided needed information, but more importantly, HHS signed off on BOSS, saying that the software system would always be compatible with any state-administered computer system. This helped solidify the social services community's commitment to the demonstration project.

United Seniors Health Cooperative. The project partner with which the Children's Alliance worked the most extensively was the United Seniors Health Cooperative (USHC). USHC is primarily an organization that represents senior citizens in the Washington, DC, metropolitan area. USHC offers counseling on medical programs, insurance, and so forth. In the late 1980s, USHC started developing software to help counsel seniors on their benefits eligibility. In 1986, the Robert Wood Johnson Foundation funded the development of the Benefits Outreach Software System, the system that became the basis for SafetyNet-NH. As other organizations developed an interest in this software, USHC expanded its software development department to handle these needs. Prior to embarking on the New Hampshire project, USHC had conducted a 3-year demonstration of BOSS in Baltimore and Prince George's County, Maryland.

USHC's role during the demonstration project included the following tasks:

- Provide strategic planning and project management consulting.
- Direct, design, develop, test, and implement all software and network systems.

- Direct research on eligibility criteria for assistance programs.

Project Costs

The TIIAP grant supplied $82,741 of the $235,956 spent during the demonstration project. The remaining funds were provided by various public and private agencies, including NYNEX, Dartmouth-Hitchcock Hospital, the state of New Hampshire, and Lockheed Martin.

The biggest match received by the Children's Alliance came from the Community Grant Program administered by the Health Care Transitions Fund. This money was funneled to the Children's Alliance through the Technology Partnership, a coalition of networks. The Community Networks received the grants to enhance service delivery and increase cooperation among service providers.

C. PROJECT CONTEXT

Community Description

Based on the 1990 decennial census, there were 1.1 million residents in New Hampshire. Of these, over 278,000 were children under the age of 19. Approximately half of New Hampshire residents lived in communities with less than 10,000 residents. About half of these communities were considered "truly rural."[1]

The effects of the faltering economy and the cutbacks in the defense industry were not felt in New Hampshire until after the census was conducted. The Children's Alliance cites statistics reported in the Manchester *Union Leader* from November 23, 1992: "Between 1989 and 1992 the AFDC caseload increased 163 percent and the number of food stamp recipients increased 182 percent, the sharpest increase in the country."

In addition, the *New Hampshire Kids Count 1995 Data Book* reported that he poverty rate for children living in the poorest communities (11.2 percent) was three times greater than the poverty rate for children living in low-risk towns (4.0 percent).

Status of Telecommunications/Information Infrastructure Environment Prior to the TIIAP Project

Prior to embarking on the SafetyNet-NH project, the Children's Alliance conducted a needs assessment to evaluate client access to benefits. It discovered that the only interactive computerized network of use to poor families in New Hampshire was administered through the Department of Employment Security (DES). This system provided a listing of available jobs. The list was accessible via modem from each district office and city welfare office. Clients generally required the assistance of a case worker to operate the system.

The benefits assessment revealed that the lack of a computerized social services network had created a situation where district offices were the only places where AFDC and Food Stamp eligibility could be determined. In addition, the lack of a computerized network made it impossible to outstation

[1] Data taken from the assessment "Benefits Access for Rural New Hampshire Families" conducted by the Children's Alliance of New Hampshire.

caseworkers and eligibility technicians. This meant that clients in need of these services had to travel to 1 of the 12 district offices across the state to submit an application for benefits. For clients living in rural areas, especially those without easy access to public or private transportation, this was particularly burdensome, as all of the district offices were located in areas with dense populations.

Some individual benefit programs had already established their own networks. For example, the Women, Infants, and Children (WIC) program had just established a new computer system that would allow all agencies and clinics to access information, file client records, and maintain program information. The new computer system allowed WIC to expand its operations. Some welfare agencies had also developed partially computerized intake processes. For example, the Concord City Welfare Office was using a software package known as WELPAC to record client data and issue vouchers.

D. PROJECT IMPLEMENTATION

Primary Activities/Milestones that Occurred Prior to the TIIAP Grant Period

Initially, the Children's Alliance of New Hampshire was a Kids Count grantee. This is a program sponsored by the Annie Casey Foundation that funds annual reports on the welfare of children on a state-by-state basis. The funds received for this program composed a large part of the Children Alliance's budget.

The Children's Alliance was also an associate member of the National Association of Child Advocates (NACA). NACA talked to the Casey Foundation about getting a mini-grant to study access to social services benefits, which led to a $5,000 grant for the Children's Alliance to conduct an examination of benefits access in New Hampshire. Until that time, the social services delivery system had never been analyzed.

The Children's Alliance contracted SPT Consultants to perform the assessment. SPT Consultants talked to several people including CAP directors, the Bureau Chief of WIC, and employees of Economic Services. They also conducted focus groups with low-income families from rural areas. During the focus groups, they learned that people in need of services were tired of going from agency to agency and having to tell the same story over and over again. They were also frustrated because they could not find one comprehensive explanation of how the social services system worked. In part, this was due to the fact that the delivery of services varied from region to region, so it was difficult to compile information about all the services in one place.

Other barriers to access that were identified during focus group sessions include the following:

- Lack of a centralized location to apply for all the assistance programs.
- Different income and asset criteria among assistance programs.
- Lengthy and complex application forms.
- Inadequate outreach efforts to inform people about assistance programs.
- Lack of public transportation compounded by the need to make multiple visits to multiple offices.

After the needs assessment was completed, NACA went back to the Casey Foundation for a $20,000 grant for the Children's Alliance to conduct a feasibility study of having social service providers switch to a single application for services. At the same time, the Director of Marketing at USHC arranged a meeting with NACA. As a result, the Children's Alliance of New Hampshire conducted the feasibility study with the idea that the Benefits Outreach Software System, developed by USHC, would be the software application that New Hampshire's social service providers would eventually use.

BOSS was a software package capable of screening clients against eligibility requirements and printing out a report of all the projects for which a client was eligible. It could also be used to reduce barriers to access to services and to streamline the benefits application process. It was hoped that the program would eventually have the technology to generate completed applications and integrate document scanning technology.

The Children's Alliance used $10,000 to conduct a feasibility study. Exploratory interviews were conducted with CAPs, the New Hampshire Department of Health and Human Services, and other social service providers to determine whether using BOSS would be feasible and desirable. SPT Consultants used $5,000 of this grant money to introduce USHC to "different players" in New Hampshire.

The feasibility study lasted for approximately 6 months. It was completed in April 1994, but no feasibility study report was written. Rather, the study generated consensus among social services providers to move forward with BOSS, and it identified potential funders (e.g., Council on Disability and Aging). In the long run, this feasibility study also helped gain acceptance for BOSS across the state because potential users recognized how much work would be involved in considering another vendor.

In the spring of 1995, the project director found out about the TIIAP grant. The project director wrote the narrative for the TIIAP application, and the Children's Alliance's president completed the budget.

After the application was submitted, the Children's Alliance went in search of matching funds. It was fairly certain it would be able to locate the required funding from private corporations and the state. The TIIAP regulations forced it to look at a variety of different funding sources. As a result, the Children's Alliance "found lots of interest in the project." The project director and president also realized that they had misunderstood the budget aspect of the application process. For example, they discovered that money allocated to the state of New Hampshire by the federal government could not be counted as matching funds.

In August, Commerce asked the Children's Alliance to redo the budget to demonstrate the percentage of shared personnel. The scope of the budget and the amount of the budget were not allowed to change. In retrospect, the project director said that these were probably good guidelines because they probably would have reduced the $212,000 match that they originally proposed as it exceeded the match required by TIIAP. The 17-month TIIAP grant was awarded in October 1995.

Immediately after the grant was awarded, the Board of Directors for the Children's Alliance had to decide whether to accept the grant because it would require taking state money. The Children's Alliance had only taken state money once before during the Medicaid Outreach Project, and it was concerned about the implications of accepting state money again. It wanted the Children's Alliance to remain an independent organization without ties to the state. Ultimately, the Board of Directors voted to accept the Department of Commerce grant.

At the time SafetyNet-NH began, the Children's Alliance was probably the only organization that could have taken on the project. The Children's Alliance had already established its reputation as a child advocacy organization. In addition, while the Children's Alliance was involved with the social services community, the organization was not a service provider. This neutrality helped the Children's Alliance move the demonstration project forward.

Primary Activities/Milestones that Occurred During the TIIAP Grant Period

Funding. After the TIIAP grant was awarded, the project director worked on certifying the match. She started by asking the state for $32,000, an arbitrary number developed by the Children's Alliance during the budgeting process. The Children's Alliance selected its other funders based on leads from organizations that had given the Children's Alliance money previously, organizations that had given tentative commitments to supporting the project, and other organizations that it had determined to be potentially good sources of funding. Funding was obtained from several sources including NYNEX, Dartmouth-Hitchcock Hospital, the State of New Hampshire, and Lockheed Martin.

These funds were needed to fulfill the match requirement and to develop a DOS version of BOSS that was accessed through Windows. The Maryland BOSS program was used as a prototype to develop the New Hampshire BOSS program. USHC used a DOS-based approach in New Hampshire because it was easier to install than a Windows version would have been.

As the demonstration project progressed, some confusion about financial responsibility for the program began to erode community support for SafetyNet-NH. The Children's Alliance was able to help allay these concerns by holding a press conference when Community Services Gateway (CSG)[2] was installed at the first pilot site. At the same time, SafetyNet-NH received major endorsements from NYNEX and the New Hampshire Department of Health and Human Services. The project also received crucial endorsements from the New Hampshire Municipal Association and the CAPs themselves.

During the third quarter of the project, project staff noted that their role had changed from a grantee to a contractor for services. To this end, the Children's Alliance began to develop a pricing structure with a new contract that would more accurately reflect the relationship between the Children's Alliance and the pilot sites. A new agreement was reached with the CAPs that reflected these changes.

Oversight Committee. The project director also identified individuals and organizations that might be interested in the demonstration project to form an oversight committee. She relied on the contacts made by SPT Consultants and the ones she had made doing her demonstrations of BOSS during the feasibility study to select possible oversight committee members. The committee members came from CAPs, other municipalities, the Community Services Council (statewide information and referral system), and Disabilities Council, as well as government offices, nonprofit agencies, and hospitals. This helped to establish broad-based support for the project and cooperation and trust among different participants. The project director chaired the committee and helped build consensus among its members.

Originally, the committee was established to help solidify the public-private partnership. As the project moved forward, the oversight committee's main role changed from helping to arrange demonstrations of BOSS, to helping the Children's Alliance gain access to the "right people" to ensure the long-term success and sustainability of the project. Individual contributions made by members of the oversight committee range from the development of confidentiality protocols to networking support to

[2] CSG enabled e-mail communication and teleconferencing among other things.

community presentation planning. Throughout the demonstration project, the oversight committee helped to break down turf issues between local agencies and to build an environment of trust and cooperation between social services providers.

Selection of Pilot Sites. One of the individuals invited to join the oversight committee was the director of the Concord City Welfare. Originally, the Children's Alliance was only going to use CAPs as pilot sites, but the Children's Alliance decided that it would be good to have a municipality serve as a pilot site. Concord City Welfare had already been used as a pilot site for state projects, and its director was also the president of the Welfare Association. Her position helped increase awareness of SafetyNet-NH throughout the service provider community.

As the project progressed, municipalities began to play a larger role in the provision of services. Consequently, the Children's Alliance added another municipality to its list of pilot sites. The complete list of pilot sites included 17 different agencies, including CAPs, municipalities, and other community-based service providers. Exhibit 1 provides a complete list of these sites.

Technical Equipment Survey. Prior to any of the pilot sites going on line, the project director and technical/administrative assistant conducted a survey of all the planned pilot sites to assess their existing technical equipment. The survey asked for the following information:

- User's comfort level with current hardware and software;
- Type of computer;
- Memory capacity of computer;
- Modem type;
- Type of printer;
- Number of telephone lines;
- Whether site needed assistance in identifying or purchasing hardware/software;
- If the site used a laptop;
- Planned upgrades; and
- Current computer backup system.

The technical needs of the sites were different from what the Children's Alliance had anticipated. For example, it was determined that the pilot sites needed more telephone lines. Many sites asked for technical expertise and technical support throughout the project. Accordingly, the Children's Alliance provided technical support to sites as they purchased hardware and software and during the installation of BOSS.

Exhibit 1. Pilot sites

Concord City Welfare
Lebanon City Welfare
Portsmouth City Welfare
Southwestern Community Services of Keene
Southwestern Community Services of Claremont
Strafford Community Action of Milton
Belknap/Merrimack CAP at Laconia
Rockingham CAP (WIC mobile unit)
Tri County CAP of Berlin
Southern NH Services at Nashua
Planned Parenthood of Portsmouth
Seacoast Healthnet
Families First
Milford City Welfare
Rockingham Visiting Nurses
Monadnock Family Services
Keene City Welfare

Later in the project, staff reflected that it was useful to do a technical assessment before installation and to provide technical assistance prior to installation. Staff also found that having PCAnywhere, a software package that allowed remote access to pilot sites, at every site reduced the number of onsite visits they had to make to correct problems.

Eligibility Requirements. As the system was developed, the project director was responsible for researching and summarizing the eligibility criteria for the programs that would eventually be included in BOSS. Her initial list of programs included CAP programs, large state programs, and other programs that were recommended for inclusion. The process of gathering program descriptions and eligibility requirements was a difficult task.

There were several problems in determining eligibility requirements for each project. Initially CAPs and other local agencies did not want to release eligibility requirements or application forms. They were concerned about client confidentiality issues. In other cases, programs had eligibility requirements that were based on non-monetary measures. For example, the criteria for developmental disability programs were based on cognitive measures rather than financial criteria.

Acquiring program information and eligibility requirements for state programs turned out to be one of the most difficult parts of this phase of the demonstration program. Initially, the New Hampshire Department of Health and Human Services (HHS) identified one person to assist the Children's Alliance with the project. This contact person was supposed to provide the project director with all the information she needed on the 32 programs administered by the state. In the end, the Children's Alliance received the information from the Office of Economic Services.

During the course of the project, the oversight committee took over responsibility for determining which programs would be added to BOSS as additional pilot sites began using the system. The intake workers also had some input in this process. While it remained the project director's responsibility to get

the program descriptions and eligibility requirements, once a program was added to BOSS it was the program staff's responsibility to notify USHC of any changes in requirements or programs. Exhibit 2 provides a partial listing of programs included in BOSS.

Exhibit 2. Sampling of programs included on BOSS-CROSSCheck

Aid to Families with Dependent Children - Emergency Assistance
Aid to Families with Dependent Children (AFDC)
Buy-In Medicare
Child Care (Eligible at 140 percent of Federal Poverty Level)
Child Care (Eligible at 170 percent of Federal Poverty Level)
Child Care (Eligible with AFDC Financial Assistance)\
Children with Severe Disabilities
Commodity supplemental Food Program (VSFP)
Community Developmental Services
Community Developmental Services and Early Intervention
Community Residence (Enhanced Family Care Facilities)
Concord City Welfare
Earned Income Tax Credit
Extended Medical Assistance (Medicaid)
Food Stamp Program
Fuel Assistance Program
Granite State Independent Living Foundation
Healthy Kids Corporation
Home & Community Based Care for Elderly and Chronically Ill
Home & Community Based Care - Individuals with Acquired Brain Disorder
Home Care for Children with Severe Disabilities - Cat. Needy
Home Care for Children with Severe Disabilities - Med. Needy
In and Out Medical Assistance
Keene City Welfare
Lebanon City Welfare
Medicaid for Poverty Level Children
Medicaid for Pregnant Women
Medical Assistance (Medicaid)
Nursing Facility Care
Qualified Medicare Beneficiary (QMB)
Residential Care Facility
Senior Community Services Employment Program
Special Supplemental Nutrition Program - WIC
Specified Low-Income Medicare Beneficiary (SLIMB)
State Supplement Program (OAA)
State Supplement Program - Aid to the Needy Blind
State Supplement Program - Aid to the Permanently Disabled
Weatherization

The time required to bring a particular program on line varied. It was easier for USHC to put information about federal programs into BOSS because it already had information about these programs. In addition, USHC could only include programs with number-based eligibility requirements. Once these program criteria were established, USHC had to develop questions to use in BOSS that would indicate program eligibility.

In the fall of 1996, the Children's Alliance hired a subcontractor to collect and interpret the eligibility requirements for all community-based programs located in BOSS service areas. At the same time, a letter was drafted to the New Hampshire Department of Health and Human Services (HHS) saying that the state agency was responsible for keeping the information about its programs accurate.

Technical Progress. The Community Services Gateway (CSG) was an online bulletin board that was designed to provide a platform to facilitate the search for solutions to local problems. The system was designed to be rapid and responsive. When CSG was added to BOSS in late 1995, BOSS did not have the capacity to screen applicants for every existing local, state, or federal program. It was thought that social workers would be able to use CSG to access the statewide information and referral database known as HelpLine to find additional resources for clients. CSG also added conferencing capabilities and e-mail to BOSS.

On June 28, 1996, the day after the first training session, BOSS went on line. Files were downloaded from USHC using CSG. Initially BOSS contained seven programs. Two additional programs were being beta-tested, and 20 more programs were being programmed by USHC.

Then an intake worker from Concord City Welfare, the first pilot site to go online, joined the project director in her efforts to test the software before sending it out to the pilot sites. They continued to test all the changes before they were sent to the pilot sites.

As the demonstration project progressed and service providers continued to form coalitions, the evolving community and regional networks needed to be able to share client data, which could be accomplished most efficiently and effectively using electronic data transfer (EDT). The first program selected for EDT was the Fuel Assistance Program. The Children's Alliance and USHC started planning to electronically transfer data from the Low Income Heating and Energy Program (LIHEAP) to the Fuel and Weatherization application.

It was also necessary to integrate BOSS with CASTS, the service accounting system used by the CAPs to fulfill their reporting requirements to the Community Services Block Grant (CSBG). The problem was that intake workers had to enter the same information twice, once in CASTS and once in BOSS. The Children's Alliance wanted to eliminate the need to double enter data in hopes that more intake workers would screen clients using BOSS if it did not create extra work for them. Integrating proprietary software with SafetyNet-NH did not become a reality, however, until a second version of BOSS known as CROSSCheck was developed at the end of 1996.

In October 1996, Concord became the first pilot site to start using BOSS. Other sites came online gradually as problems with the software were resolved. Each time a site encountered a problem with the system, it was asked to complete a problem sheet. Often problems were brought directly to the attention of the Children's Alliance or the intake worker at Concord City Welfare who was involved in testing the system. During the testing phase, when Concord had problems with or concerns about the system, the office director would often take their problems and concerns to the Advisory Board.

BOSS began receiving weekly upgrades with new programs. In addition all the CAPs had acquired file servers. The Children's Alliance was also installing BOSS on networks with 20 computers. While this increased the number of staff that had access to BOSS, it also meant that the Children's Alliance staff had to work closely with network administrators to monitor system problems.

By December 1996, 11 pilot sites were on line. The remaining six sites had become members of regional service coalitions that also wanted to install BOSS. "Agencies are clearly stating that they do not

want to be service islands, they want to be part of a local network of providers" (Quarterly report). Accommodating these sites expanded the scope of the original proposal to include additional users.

Development of CROSSCheck. As more sites started using BOSS, the project director told USHC that the sites needed a demographic component in the program and that the program needed to be more flexible. Under the original system, intake workers had to take information from individual family members separately and store the information in a separate file. This made if difficult to refer to the needs of various members of the same family. The sites wanted to be able to enter information about an entire family into one file and to be able to access this data quickly and easily. This led to the development of CROSSCheck. It should be noted, however, that developing a new version of BOSS was not in the original scope of the project.

Six Community Networks across the state agreed to pool their money to pay for the development of CROSSCheck. The Community Networks were formed when the CAPs realized they wanted to be linked within their own areas. Eventually, the Community Networks expanded to include all local service providers except municipalities. When these Community Networks agreed to fund the development of CROSSCheck, the Technology Partnership was formed. The partnership was established during the demonstration project, but it has had enduring effects.

In November 1996, USHC introduced its vision for CROSSCheck. In December 1996, CROSSCheck was demonstrated to the community networks. USHC and the Children's Alliance chose April 15, 1997, as the target roll-out date for CROSSCheck. CROSSCheck, the Windows-based version of BOSS, was written in Visual Basic using Microsoft Access as the database. Visual Basic allowed increased flexibility and responsiveness to the needs of the end user. CROSSCheck could also accommodate the need for intake screening, document scanning, case management features, EDT, and application generation. CROSSCheck, also referred to as BOSS 6.0 in quarterly reports, was designed to replace the DOS-based version of BOSS (BOSS 5.0).

At the start of the demonstration project, the goal was to transfer data from community-based agencies to the state's Eligibility Management System. With the rise of regional coalitions, the goal changed to focus on services that could be delivered among regional networks of community providers and from the state to these community-based partners.

As the development of CROSSCheck proceeded, it was determined that clients might be better serviced if technology is focused on case management rather than application generation. And, if case management was going to succeed at the local level, workers needed the ability to evaluate the availability of long-term assistance. This led to the creation of a case management development team.

CROSSCheck also enables intake workers to track clients over time. Intake workers can determine which programs clients applied for and which programs eventually provided them with support. This allows social service agency providers to monitor how their clients' needs change over time.

The Children's Alliance had to take several steps in order to prepare for CROSSCheck and its expanded capabilities. First, the Children's Alliance asked for and received a 6-month, no-cost extension from the Commerce Department. It then had to prepare the pilot sites for CROSSCheck. The sites needed more RAM and additional hard disk space. Legal consultants created two waivers. One was a waiver that clients would have to sign to allow their data to be shared across agencies. The second waiver addressed the transfer of agency data to a regional data repository. Integration activities between SafetyNet-NH and proprietary software also continued. Most sites wanted to be able to access their proprietary software through the CROSSCheck system. Planning for and conducting the integration added to the operating costs of SafetyNet-NH.

While CROSSCheck was being developed, additional client intake points were identified. The Technology Partnership of Health Care Transition Fund Grantees contributed $49,500 to install CROSSCheck at additional sites. The Children's Alliance saw this as a "vote of confidence from the provider community" and as "an indicator of long term commitment to the project and may ensure its viability." The Children's Alliance was also working with technical consultants to determine how CROSSCheck needed to be developed for regional server networks. It was also researching current industry standards to develop information-sharing mechanisms. The Children's Alliance assumed a management role in product development to facilitate concurrent development with USHC.

In June 1997, 2 months behind schedule, CROSSCheck was finally released by USHC. The program did not install correctly, and the pilot sites decided that they did not want to use the new program and went back to using the DOS version of BOSS. USHC was still continuing to revise the CROSSCheck program at the time the site visit was conducted. By that time, several of the original pilot sites were using the CROSSCheck program while others continued to rely on the DOS version of BOSS. Based on our observations, the continued reliance on the DOS-based version of BOSS at some pilot sites was due to a combination of factors, including a lack of motivation or interest on the part of the end users to make the change and a lack of technical support to fix any problems a particular site was having with the program. Regarding the latter explanation, it was difficult to determine to what degree the problem was caused by the sites failing to mention the problem to USHC or the Children's Alliance, or by a backlog of technical problems that USHC was in the process of correcting.

Training. The first training session, led by USHC staff members, was held on June 27, 1996. Representatives from eight pilot sites attended the 3-hour training session. Many of the intake workers in attendance had little or no computer experience, and many were computer phobic. The training was also attended by representatives from NYNEX, the Centers for Disease Control and Prevention, and the New Hampshire Department of Health and Human Services.

The initial training session provided an overview of the software and gave intake workers opportunities for role plays. Following the first training session, the Children's Alliance provided most of the training for using the BOSS system. Staff members from USHC also attended and taught at several of the training sessions. Training was provided for every major version of BOSS. According to a trainee, the sessions were held all day and "were hands-on, fun, and easy to understand. There were lots of visuals and instruction." After all sessions, intake workers received manuals explaining how to operate the system.

Steps Taken to Sustain Project Activities Beyond the TIIAP Grant Period

Many of the steps taken to sustain the project beyond TIIAP evolved out of the demonstration project and the need to upgrade to newer technology. At the time these decisions were made, they were essential to completing the demonstration project. They have also become crucial to maintaining the project after the end of the demonstration project.

During the course of the demonstration project, the CAPs realized they wanted to be linked within their own areas. This led to the development of Community Networks. The networks expanded to include all local social service providers except municipalities.

The development of CROSSCheck went beyond the scope of the original project, but SafetyNet-NH had to be modified to work on a Windows-based, rather than a DOS-based, platform if it was going to continue to be useful to community-based service providers. Technology was changing faster than the

Children's Alliance or USHC could have imagined when the original grant proposal was written. The switch to a Windows version of BOSS had high development costs. The financial assistance for developing the next generation of BOSS that was provided by the Technology Partnership made the project possible, but the Technology Partnership also became a long-term mechanism to support SafetyNet-NH beyond the demonstration project.

A second major community-based accomplishment achieved by the Children's Alliance was getting line item budgets for technology in agency budgets. This helped raise awareness about the need to implement technology-based solutions to the problems facing New Hampshire's service providers. It also increased the amount of money available to the agencies to purchase and support new technology in the future.

In December 1996, at the same time CROSSCheck was under development, one region contacted the Children's Alliance to say that it was developing an Intranet and needed web-enabling software. USHC said this could be done and be compatible with BOSS. In the spring of 1997, USHC asked the Children's Alliance to hire a web developer to develop a web version of CSG. At the same time, the project director submitted a proposal to the Health Care Transitions fund to support technological changes. She asked for $100,000 but received only $50,000, which were used to hire a web developer at $1,600 per week.

Activities/Milestones That Occurred Following the TIIAP Grant Period

Following the completion of the demonstration project, the Children's Alliance withdrew from active participation in bringing CROSSCheck to New Hampshire. The staff felt that its role had been to demonstrate the feasibility of the system, and with that successfully accomplished, it wanted to refocus on the needs of children in New Hampshire.

At the time of the site visit, USHC was providing 100 percent of technical assistance and systems support and maintenance to New Hampshire. Agencies can dial toll-free to connect with CSG. They can also dial direct to reach USHC staff. Two members of the USHC staff, however, were in the process of forming a for-profit, independent company to assume responsibility for providing CROSSCheck to New Hampshire. While the Children's Alliance was offered ownership in this new company, the Alliance was not interested in a long-term role for itself in the project. The project director, however, did choose to continue working with SafetyNet-NH. She left the Children's Alliance and joined the Community Health Institute so that she could stay involved with the project. At the time of the site visit, she was dedicating 60 percent of her time to the community networks and 40 percent to helping the CAPs develop an information-sharing system.

The web technology that the Children's Alliance and USHC began pursuing in the spring of 1997 will be enough technology to carry the project through over the next 5 years. Local agencies have been given a standard template to provide information about eligibility requirements and a program description. In addition, CROSSCheck training and installation are continuing as the project focus has moved to supporting regional networks of users. Additional programs are being added to CROSSCheck as quickly as they can be programmed, and new security features are being implemented in some regions to safeguard client information

Issues

This section summarizes some of the major issues the Children's Alliance had to confront as the demonstration project progressed.

Impact of Welfare Reform on SafetyNet-NH. Welfare reform's impact on the project shifted project goals from improving access and multiple points of entry into a system of managing self-sufficiency and getting people out of the system. Some program eligibility requirements became harder to quantify making it harder to assess client eligibility through BOSS. At the same time, changes to the federal welfare system resulted in block grants to states. The Community Block Grants from the State of New Hampshire necessitated that regional providers collaborate and cooperate. BOSS was able to help facilitate this.

SafetyNet-NH was underway before the changes to the welfare system were mandated. Project staff and the BOSS software were able to adapt to the new changes and to meet the new needs of community-based service providers through a technology-based solution.

Community Developments Impacting SafetyNet-NH. On June 12, 1996, the New Hampshire Department of Health and Human Services awarded $4 million to community coalitions to develop model health care and social service delivery systems and to increase cooperation among community-based agencies. Approximately $1.2 million went to 11 communities that proposed technology-oriented projects. They identified the need for increased technology to allow for multiple entry points into the system and to enhance interagency communication. Six of the 11 sites specifically listed CSG-BOSS as the technology solution they wanted to implement, and the remaining 5 alluded to BOSS in their proposals.

By December 1996, SafetyNet-NH had been endorsed by six regional groups that wanted coalition-wide implementation plans. This required a reevaluation of the BOSS software to develop cross-platform, web-based intranet-compatible applications written in Java with html interface. The Children's Alliance worked with regional groups to develop a plan that would provide a more accurate assessment of their capabilities to implement a technology solution and stimulate state involvement. Implementing these plans would require regional servers and networked applications, but would allow the service providers to take advantage of the economies of scale. This showed that community-based service providers could be proactive in developing technology solutions, rather than relying on the state to take care of their problems. This also reaffirmed the potential for CSG-BOSS to become the industry standard intake tool.

During the demonstration project, the project director's role expanded to include a leadership role in statewide technology planning activities for community-based agencies. At the same time, the Children's Alliance was able to send a couple staff members to key statewide technology planning meetings that went beyond the scope of SafetyNet-NH. While these activities generated additional support for SafetyNet-NH, they also reduced the amount of time the Children's Alliance staff had to concentrate on some aspects of the demonstration project.

While the demonstration project was in progress, the New Hampshire Department of Health and Human Services (HHS) underwent a massive reorganization. This resulted in a new state examination of BOSS and confusion over who would be determining state program eligibility requirements. HHS resolved these issues and guaranteed continuity between any future state system and CROSSCheck. For example, application generation and electronic data transfer will always be possible between CROSSCheck and any state system. This decision helped lend credibility to BOSS outside of the pilot sites. Other service providers were more interested in investing in a system that would be compatible with any state system, rather than one that operated as a completely separate entity. This helped to generate

interest in sustaining the project beyond the demonstration phase. It was also decided that CROSSCheck would never be required software for service providers in New Hampshire.

At the state level, on January 22, 1998, the New Hampshire Department of Health and Human Services (HHS) agreed to keep all the algorithms current and to join the Technical Partnership. HHS is going to help the community networks make technical decisions that will enable local systems to link with the state. Community networks will take responsibility for keeping their program information current. HHS and the community networks will work together to raise resources. A committee is going to be established to raise money. They may consider going after another TIIAP grant.

Outreach. One of the first things the Children's Alliance did to publicize and generate support for SafetyNet-NH was to do project demonstrations across the state. The project director demonstrated BOSS to state employees, community-based service providers, representatives from private corporations, and so forth. This strategy generated a tremendous amount of interest in the project and support for SafetyNet-NH.

A second major outreach project was developing materials that would explain BOSS to clients. The Children's Alliance wanted clients to know more about the system and how they could benefit from BOSS technology.

Throughout the project, the Children's Alliance staff held or participated in a number of meetings to discuss SafetyNet-NH's progress and future plans. For example, they held an informative technology roundtable for the human service collaborative. They made presentations to regional service networks developing information-sharing strategies. They made a presentation at the CAP Director Association annual meeting and presented to community leaders at a Children's Defense Fund annual conference.

Difficulties Testing Software. Another issue for the Children's Alliance was the difficulty it experienced in being involved with software testing. Staff originally expected only to test and implement the software at several sites; instead, they provided guidance to all the sites throughout the demonstration project. The president of the Children's Alliance attributed the need to provide such extensive support to the pilot sites to the failure to recognize how great the need was for something like BOSS from the very beginning. In part, this was because the project was started before the national welfare system was decentralized. Once the welfare reforms occurred, the need to have something like BOSS dramatically increased.

Compatibility Between BOSS and Preexisting Computer Systems. A difficulty the Children's Alliance did not anticipate was having BOSS be compatible with already existing computer systems. Several of the sites used proprietary software prior to getting BOSS. For example, Concord City Welfare was using WELPAC to enter client information and produce vouchers before BOSS was installed. Since there was no compatibility between the two programs, intake workers had to continue using the WELPAC program in order to effectively do their jobs.

If BOSS was going to be the standard intake screening tool, it was essential that these older software programs be linked or integrated with BOSS. Some of these problems were still being addressed at the time of the site visit. For example, USHC had bought the rights to WELPAC and was working to integrate the software with BOSS. One of the major difficulties with any of the integration processes, however, was that they required the coordinated efforts of several software developers.

Lack of Technical Knowledge Among End Users. Handling the lack of technical knowledge or fear of technology among service providers and others involved with the project was another major issue the Children's Alliance and USHC had to handle before BOSS could become a statewide, effective client

screening tool. They encountered "anti-tech" attitudes among certain sectors and resistance to change. Among many of the intake workers, there was a conflict between having to focus their attention on a computer rather than on a client. Demonstrations of BOSS, user training, and efforts to help intake workers see the software as a helpful tool assisted in alleviating these difficulties.

Selection of Pilot Sites. The Children's Alliance also found it tempting to install BOSS at sites with resources rather than those with high socioeconomic risk. This became a particularly frustrating situation when the pilot sites at two of the poorest communities involved with the project decided not to use BOSS because they were intimidated by the computer, even after extensive training and visits by project staff. At the time of the site visit, these pilot sites were still apprehensive about using BOSS/CROSSCheck.

Keeping the Client as the Focus of the Project. Another issue the Children's Alliance struggled with was always keeping the client as the focus of the project. Project staff did not want to lose sight of their goal to increase access to benefits for low-income families. They did not want SafetyNet-NH to be a tool only for administrators. This was a challenge for the Children's Alliance as it put its energy into getting endorsements for SafetyNet-NH from decision makers across the state. These concerns led to the establishment of a project work group. The group's biggest concern was that the concerns of the community partners would not be minimized by state officials.

Providing User Friendly Information. Throughout the project, project staff were always concerned that the program information BOSS provided to clients was user friendly. The BOSS printouts included the program's name, a contact phone number, the address of the organization, and a brief description of the program and what it offered

Change from Managing Information to Managing People. As the demonstration project progressed, one of the major issues changed from how to manage information in a cost-effective way to how to manage someone in the system and how to help that person become self-sufficient. The Children's Alliance and USHC found that if you manage information effectively, people will have access to it.

Vaporware. When CROSSCheck was first demonstrated to the Community Networks, they were extremely enthusiastic about using the new software. Unfortunately, before CROSSCheck could be made available to them, USHC had to do a tremendous amount of work on the software package. Thus, the software that was demonstrated to the end users interested in the product did not really exist; it was only "vaporware." The vaporware issue led to concerns among project staff about the new software package ever becoming a usable tool.

Problems

While the Children's Alliance dealt with several problems throughout the course of the demonstration project, it successfully overcame most of the difficulties it encountered. This section summarizes the major problems the Children's Alliance and its partners faced while trying to bring SafetyNet-NH to community-based service providers throughout New Hampshire.

Determining Appropriate Contacts. During the initial startup phase of the demonstration project, one of the hardest questions for the Children's Alliance to answer was "Who were the real players?" Resolution of this issue required the involvement of the oversight committee to help the project director identify and gain access to the "right people" to ensure the long-term success and sustainability of the project. For example, the project director had a lot of difficulty determining who was in charge of

technical matters for the state. The Children's Alliance wanted to have state support for the project and a guarantee that the state's computer systems would always be compatible with BOSS.

Sharing Information with the State. The Children's Alliance successfully organized a coalition of social service agencies and other service providers to share client information with the state, but the state was not ready to receive the information. It was decided, however, that BOSS offered enough benefits to the service providers that the project should be pursued with or without state involvement.

Problems with Project Partners. One of the biggest problems encountered by the Children's Alliance resulted from not having a formal contract with USHC until halfway through the demonstration project. For USHC, this situation was not unusual and did not present any problems. For the Children's Alliance, however, the lack of contract eventually became an uncomfortable situation.

There were also problems between the two entities because USHC was originally supposed to be a partner, but by the end it was neither truly a partner nor a vendor. USHC was not a development firm. According to project staff, USHC did not have the technical knowledge required to move SafetyNet-NH into web technology. In addition, the firm did not provide manuals or documentation for how the system worked. Also, according to the Children's Alliance, as the project moved on, USHC became more concerned with marketing the product than improving it and supporting it.

Changing Technical Needs of the Project. USHC did not know how to keep up with the changing technical needs of the service providers. It started to fall behind on the project, making the rollout of CROSSCheck later than planned. There was some concern among staff at the Children's Alliance about the future of the project after the demonstration was complete.

Nonstandardized Computer Equipment. From a technology standpoint, one of the biggest problems the Children's Alliance faced was that computer equipment across pilot sites was not standardized. The Children's Alliance conducted an equipment assessment prior to bringing any of the pilot sites on line to determine what equipment sites had and what they needed. This was time consuming and difficult for staff at the Children's Alliance as they did not have training in computer technology.

USHC also commented on this problem. It said that many of the sites lacked hardware, modems, and technical expertise. Where sites did have computer equipment, moreover, it was often difficult to build on their existing system.

Collecting Program Eligibility Requirements. USHC also reported having problems because it was never able to establish partnerships with local agencies to get eligibility requirements and program descriptions. This problem was due, in part, to USHC being headquartered in Washington, DC, but it was also caused by agencies' unwillingness to provide this information. The project director, the liaison between USHC and the agencies, had difficulty collecting eligibility requirements and program descriptions from several agencies. If USHC did not understand the information provided or needed more information, it would have to contact the project director who would, in turn, contact the agency again. This became a time-consuming and frustrating process.

At the local level, the project director had to do all the research to obtain eligibility requirements and program descriptions. She began by compiling a list of programs to be included in BOSS. Some of the programs she contacted refused to give her any information, for example, because of client confidentiality. Other programs were falling apart and could not be included as reliable sources of aid. And some programs, such as public transportation programs, did not fit into BOSS, while other programs used eligibility criteria based on non-monetary measures. For example, the criteria for developmental disability programs was based on cognitive measures rather than financial criteria. These programs could

not be included in BOSS because there was no way to determine if the client met the eligibility requirements using the software system.

Once the first round of information from the agencies was collected, it was difficult to keep BOSS current. The project director also ran into problems when peoples' pet programs were not included in BOSS. In most cases, it was not that the Children's Alliance did not want to have them included, rather the programs generally lacked the quantitative eligibility requirements to put them in BOSS.

Pilot Sites Unable to Run CROSSCheck. When the decision was made to start using CROSSCheck, the pilot sites were not used as the testing ground. They lacked the necessary hardware to run the system, so the Children's Alliance found other agencies to test the new system. The pilot sites did, eventually, get the equipment needed to run CROSSCheck.

Switching to CROSSCheck. There were also problems when CROSSCheck was added to BOSS. The change was supposed to make the program more user friendly. Some intake workers found accessing the program inconvenient and others reported receiving numerous error messages. Others found that the program would not load properly. At the time of the site visit, some pilot sites were continuing to rely on the original version of BOSS, rather than upgrading to CROSSCheck.

Accuracy of BOSS. The BOSS program was designed to highlight the programs for which the client was eligible. In most cases, BOSS provides this information accurately, but there were some problems with the system. For example, homeless people are eligible for fuel assistance, but BOSS would not list fuel assistance as a potential source of aid for them. Initially, inaccuracies may have deterred intake workers from using the system to screen clients as they felt that they knew more about available benefits than BOSS. While the number of programs included in the database increased exponentially, the accuracy of the information included in BOSS has become more accurate over time.

Difficulties Entering Data into BOSS. Some users complained that it was a hassle to have to click on each field in order to enter information. Many of the intake workers said they would be able to enter information more quickly if they did not have to constantly stop to click on the next field. For example, the way the program was originally designed, the clients' first and last names are in different fields so the intake worker can not enter the client's name without having to click on a new field.

Limited Number of Screenings. The extent to which BOSS was used and was beneficial to intake workers varied from site to site. At the majority of the pilot sites, intake workers only used BOSS when they had enough time to enter client information into two systems or when they were using BOSS for a specific purpose. Only one site, Portsmouth, screened every client using BOSS. Portsmouth did not have any other computerized screening mechanism in place.

Software Integration. Many sites were frustrated by the need to enter information twice, once into their proprietary software and once into BOSS. For many intake workers, using BOSS was equivalent to doubling their workload. At many sites, intake workers only selectively screened clients in BOSS or used BOSS if they had some extra time. The Children's Alliance and USHC recognized that if BOSS was truly going to become the industry standard for client screening, the preexisting software was going to have to be integrated with it. Integrating software packages was a fairly involved process that would have required the participation of several software developers.

Electronic Data Transfer (EDT). Electronic data transfer had never been a project goal because USHC did not do EDT. The Children's Alliance was locked into a project format that was dictated by USHC. In addition, because of the way the project evolved from the needs assessment to the feasibility

study to the demonstration project, the Children's Alliance never had a chance to find someone who could provide the technical expertise needed to move the project to a level where EDT was possible.

Choosing EDT Over Application Generation. As the demonstration project progressed, the Children's Alliance abandoned the idea of creating application-generating software in favor of developing EDT mechanisms. While EDT was welcomed by many agencies and intake workers, there were some tremendous concerns about client confidentiality and errors that may be made when the data are originally entered into the system. The Technology Partnership is already addressing the problems of confidentiality. For example, in the Monadnock Region, a four-level security system has been designed to prevent unauthorized access to client data.

Meeting Deadlines. In terms of scheduling, the Children's Alliance quickly found out that its proposed timeline was inadequate. It listed tasks being accomplished much quicker than they could actually be done. The scheduling deviated even further from the original proposal because of the tremendous interest in the project and because the scope of the demonstration project expanded dramatically as the project progresses.

Problems Experienced by End Users. When pilot sites first started using BOSS, they had several questions about how to get into BOSS, what to do on a screen, and why BOSS did not show that a client was eligible for a specific program. The most frequently asked question involved forgotten user IDs and passwords. As the demonstration project progressed, sites began to ask questions about how to handle hardware questions, what to do after accidentally deleting their databases, and what new hardware should be purchased to maintain compatibility. The questions were evenly distributed across the sites and reflected the technical knowledge of the user.

Confusion Regarding Financial Responsibility for SafetyNet-NH. There was some confusion about who had financial responsibility for the development of BOSS/CROSSCheck. This confusion began to erode community support for the project. Local service providers did not want to invest their resources in a system that might not be funded or might not be compatible with the Eligibility Management System operated by the state. Firm commitments to the project from the New Hampshire Department of Health and Human Services and NYNEX as well as press events helped to rebuild support for the project.

Some additional problems included the following:

- When the Children's Alliance initially looked for funding, it found that it could only approach organizations that could come with readily available monies. Project staff needed money to start working on the project and were not permitted to access TIIAP funds until they had obtained matching funds.

- A problem experienced by the pilot sites was often the lack of technical support for small emergencies. For example, when one intake worker "lost" her e-mail, she had to spend a lot of her own time trying to fix it.

- One of the major deficiencies of the BOSS software is that when intake workers update files, pre-existing data are automatically overwritten. This makes it difficult to use BOSS as an effective way to track changes over time. USHC is working on making the necessary adjustments to the software to prevent this from happening.

- The BOSS system lacks the ability to scan client documents, such as driver's licenses or social security cards. Having this information on line would simplify the data transfer

process and reduce the application burden on the respondent—one of the project's original goals.

- Another problem that had to be resolved was how long it would take to screen a client in BOSS. The software developer says it should only take 7 -10 minutes using the current system. Discussions with intake workers raised the estimate to about 20 minutes.

E. PROJECT ACCOMPLISHMENTS

Technology-Related Accomplishments

While it is relatively easy to discuss individual technology accomplishments, it is difficult to capture the magnitude of the overall effects of SafetyNet-NH. The technology used in the project revolutionized the client intake process in New Hampshire. It increased client access to benefits. It was a rallying point for hundreds of community-based agencies that previously had minimal interaction. It showed the state and the service providers that technology was the solution to many of their problems, and that this technology could be acquired and successfully implemented on a statewide basis.

Expanded Screening Process. One of the advantages to switching to BOSS from the paper intake process was that the BOSS questionnaire included some questions that intake workers were not previously asking. The program was well paced and asked questions in a logical sequence. Some intake workers reported that interviewing clients using BOSS generated more responses than when conducting interviews face to face.

The computerized application process also helped intake workers learn about other issues that may be relevant to the clients' welfare. For example, rather than only asking questions required to complete a fuel application, intake workers using BOSS/CROSSCheck collect additional information that may highlight other problems the client is having. In addition, the new software has forced service providers to think both as a community and as individuals.

More Suitable Amount of Client Contact. While BOSS can not replace the need for personal assistance, it has improved the intake process. It also increased the amount of time intake workers spent with clients. BOSS served as a bridge to form client relationships and to maintain client information on a long-term basis.

BOSS also helped reduce the need for interaction between the intake worker and clients with whom it was difficult to work. Some service providers serve diverse populations that include mentally ill people and individuals recently released from prison. In some cases, minimizing contact between the intake worker and the client made the intake worker feel more secure while also reducing the need to communicate for individuals who may have difficulty with personal interactions.

Advantages of CROSSCheck. Technology advances allowed the Children's Alliance and USHC to add CROSSCheck to the BOSS software. One of the major advantages of CROSSCheck is that is allows intake workers to collect information about an entire family at the same time. BOSS required that intake workers enter information about each family member separately.

The BOSS/CROSSCheck software has been able to provide enhanced case management capabilities and more advanced data reporting mechanisms than previously existed. For example, Concord City Welfare was using WELPAC before it received BOSS. WELPAC can not provide data

breakdowns, generate reports, or produce letters. CROSSCheck can provide data breakdowns by client sex, age, and income level. Intake workers at Concord feel that CROSSCheck is a more efficient use of time.

Intake workers liked the efficiency, the detailed information collected, and the case notes capability of the BOSS/CROSSCheck system. The system was customer friendly and provided concrete information to clients in the form of printouts and letters. BOSS also helped create a favorable situation even when the client was denied assistance; clients felt like an honest effort was made to help them. They felt like they were getting help when they receive a BOSS printout. It was something tangible that linked clients to potential sources of support. BOSS helped reduce the "run around" that clients described during the needs assessment.

Less Reliance on Institutional Memory. Prior to BOSS, intake workers had to rely on their memories to determine client eligibility for programs. BOSS helped prevent intake workers from forgetting about possible sources of assistance. It also helped eliminate concerns of senior intake staff members that junior staff members lacked the knowledge or experience to know about every possible program for which a client could be eligible. BOSS has not changed the role of intake workers, but it has made their work much easier, more effective, and more customer friendly.

Collaboration and Cooperation Among Service Providers. BOSS helped establish collaboration and cooperation among service providers. These newly established working relationships were key to getting additional project funding. These relationships extended across the state in terms of agencies' willingness to share information and resources and to trust one another. While this cooperation would have eventually happened without BOSS, it would never have happened as quickly.

EDT. Electronic Data Transfer evolved as technology evolved. The evolution of EDT changed one of the project goals from developing an application-generating system to developing a system capable of EDT. In addition, the web and Internet make it possible for EDT to occur at the convenience of the end user.

Document Scanning. The scanning and storage of graphics has also become more of a reality since the beginning of SafetyNet-NH. In addition, as technology has become more affordable, everyone is shifting to Pentiums. Pentiums process data more quickly than previous computer models. This helps them gain more acceptance from users. For example, speed diffuses the time issue involved in determining eligibility requirements. Intake workers were less likely to spend their time using a computer if they could make the necessary determinations faster on their own.

Role of Evolving Technology. Evolving technology helped to save the project. SafetyNet-NH could not have come this far with the technology that was used to develop the first version of BOSS. As the project progressed, it became crucial to be able to merge software programs, such as WELPAC and BOSS. Without this integration process, many sites would have been running two separate systems.

Impact of Project on Direct End Users

Alternative Uses of BOSS. Some intake workers found ways to use BOSS that were not originally considered when SafetyNet-NH went on line. For example, one intake worker used BOSS to screen applicants who come in for fuel assistance at a time of the year when the program is not operating.[3] She

[3] The fuel assistance program at this site only runs from December 1 through April 30.

used this information to follow up with each of these clients during the next fuel season to ensure that they do not miss the benefits. She also used the system for case management for those clients coming to see her from Salvation Army housing. In this example, the intake worker was not really interested in using BOSS until she discovered how it could be used to meet needs specific to her job.

Using BOSS to Assist Clients Over the Phone. BOSS has also proved to be a useful tool for helping clients over the phone. In some cases, if a client has already been screened in BOSS and calls for additional assistance, an intake worker might update BOSS with the client's new information and then mail the referral information to the client. This process reduces the amount of travelling a client must to do receive assistance.

Impact of the Project on Other Beneficiaries and/or the Overall Community

More Concrete Intake Process for Clients. It was more concrete for clients to be taken through BOSS rather than having a more traditional interview. It was very clear to them what was being asked, and it was also clear that something is being done to help them. The clients felt better when they left with a piece of paper, even if the intake worker had been unable to locate assistance for them.

More Referrals Made Using BOSS. Some intake workers have found that they have been able to make more referrals when they use BOSS. BOSS reduces the intake worker's need to rely on his or her memory to make referrals. Therefore, clients are receiving a more comprehensive listing of aid for which they may qualify.

Limited Liability Corporation. The Limited Liability Corporation (LLC) was an outgrowth of the advisory board that became part of the Central New Hampshire Community Provider Network. It is an incorporated organization of social service providers. The network helps to share information about changes within other local agencies. The LLC members meet every 2 months. Twenty-two of the 42 service agencies belong to the LLC. The LLC handles different issues than the advisory board did. They are currently trying to cluster agencies by service area, streamline the application process, and improve technology. The LLC has also created a waiver form to protect client confidentiality and to ensure that accurate information is provided by the client.

Formation of Community Networks. One of the major results of the TIIAP grant and the SafetyNet-NH project was that it led to the formation of the community networks and technology centers. It also gave the Children's Alliance an opportunity to build trust and consensus among New Hampshire's numerous social service providers.

Impact of the Project on Grant Recipient and Project Partners

Children's Alliance's Reputation. People in New Hampshire were very impressed with the role of Children's Alliance of New Hampshire's in bringing BOSS/CROSSCheck to the state. It gave the organization more credibility. It also increased the Children Alliance's knowledge of the welfare system and technology issues, as well as providing them with valuable contacts at the state and local levels.

Children's Alliance Role After the Demonstration Project. The Children's Alliance is no longer associated with SafetyNet-NH. The organization saw its role as bringing BOSS to New Hampshire and completing the demonstration project. While it did not anticipate that BOSS/CROSSCheck would become the industry standard for client intake, tracking, and case management, the leadership at the Children's Alliance had never intended to pursue the project beyond the TIIAP grant.

USHC staff members recognized that the Children's Alliance did not see a long-term role for itself and was not interested in long term ownership issues. USHC staff members added that nonprofits often do not see sustaining the project beyond the demonstration phase as part of their overall mission.

Continuing Role for the Project Director. As a result of the Children's Alliance's decision to disassociate itself from SafetyNet-NH, the project director left the Children's Alliance and went to the Community Health Institute so she could stay involved with the project. Currently, she is dedicating 60 percent of her time to the community networks and 40 percent of her time to helping the CAPs develop a system to share information.

New Role for USHC Staff Members. The project also had a tremendous impact on the principal project partners from USHC. Demand for BOSS/CROSSCheck became so overwhelming in New Hampshire that one of the principal software designers decided to leave USHC to start his own company. The newly formed company will help every local service provider in New Hampshire gain access to BOSS/CROSSCheck.

Impact of TIIAP Support on the Initiative

The TIIAP grant was a key factor in the Children's Alliance deciding to pursue the project. Not only did the grant provide a significant level of funding, it acted like a "giant magnet" for attracting other funding. It also functioned like a "seal of approval" which helped the Children's Alliance gain credibility with potential funders. For example, as a result of TIIAP the Children's Alliance received match money from NYNEX and eventually from the Technology Partnership of Health Care Transition Grantees. This funding provided the Children's Alliance with the necessary resource to "prove concept" and demonstrate the increased efficiencies available through telecommunication technologies. It also provided the foundation of financial support for the technical development of the community-based agencies and helped to attract enough state and private resources to ensure the completion of the demonstration project.

Without the TIIAP grant, the project probably would not have happened, leaving everyone to await the implementation of FAMIS, the state's new management information system for federal public assistance programs. While all the service providers would have been rolled into that system eventually, the communities, instead, defined a de facto system while the state continues to wait for FAMIS to go on line.

F. EVALUATION AND DISSEMINATION

Evaluation

Proposed Evaluation. In its TIIAP grant proposal, the Children's Alliance stated that it would complete a formative evaluation to ensure that local communities were being adequately served by SafetyNet-NH, convene user's groups, and make site visits. It also expected to received quantitative system measurements based on SafetyNet-NH system reports. The Children's Alliance also expected to do an impact evaluation and to publish quarterly reports of the qualitative data produced by the system. It was also hoping to survey end users about their experiences with the system.

Other Priorities. As the scope of SafetyNet-NH expanded and the project director's role expanded to include a leadership role in statewide technology planning activities for community-based service providers, the proposed evaluations of SafetyNet-NH were neglected. Increasing the number of end users

and increasing the use of technology to solve the problems facing community-based service providers took priority over evaluating an ever-changing system. In addition, the expansion of the project required larger financial expenditures on the part of the Children's Alliance than originally anticipated. This reduced the funding available for hiring an outside evaluator.

Survey of Intake Workers. The Children's Alliance did conduct a few evaluation activities, but they were not as numerous or as extensive as those originally proposed. Its first attempt at a formative evaluation of SafetyNet-NH was to put a survey on CSG to measure intake workers' satisfaction with BOSS. Few intake workers used CSG, so the response rate to the survey was very low. The Children's Alliance planned to readminister a paper version of the survey at a user's group in February 1997.

Demographic Reports. Demographic reports were also collected from each of the sites. These reports aggregated statistics on clients screened at a particular site during a particular month. The report included the following client information:

- Sex;
- Race;
- Age;
- Marital status;
- If client had a permanent address;
- Number of family members in household;
- Total number of household members;
- Benefits client was receiving already;
- Benefits for which the client was potentially eligible;
- Client, family, and household monthly income;
- Client, family, and household assets; and
- If the client was employed, had disabilities, or was pregnant.

While these reports provided useful information about who was being serviced at community-based agencies, the reports were generally not representative of an individual agency's clientele. At most sites, the majority of clients were not screened through BOSS.

Feedback During Training Sessions and User's Groups. The Children's Alliance also received feedback about SafetyNet-NH during training sessions and user's groups. During training sessions, project staff would ask how the system could be improved and what changes needed to be made to make it functional. Responses ranged from problems with computer error messages to needed expanded capabilities. For example, intake workers wanted the case management feature in CROSSCheck to be modified to allow for the editing of case notes. User's groups also presented opportunities for feedback.

During these meetings the Children's Alliance might review project goals and discuss the expected number of monthly client screenings. This gave intake workers a chance to voice any problems or concerns they had with these goals and expectations. User's groups were also a time to make wish lists. These were features intake workers wanted to have added to BOSS to make the system more user friendly or more effective.

Final Evaluation. The final BOSS evaluation was held on October 20, 1997. The Children's Alliance asked an outside contractor to conduct the evaluation session. This session collected data on what was working and what was not working, who was being screened, findings as a result of working with the system, system problems, and future needs/expectations. Representatives of city and town welfare agencies and social service agencies attended the meeting. The major findings and conclusions drawn at this meeting include the following:

- BOSS/CROSSCheck worked best for agencies with broad mandates, such as city welfare agencies, and was less effective for smaller categorical programs. The agencies with broad mandates tend to have a broader client base than the smaller programs and function as a point of entry into the system. These sites need to be able to screen clients for wide variety of programs. Smaller categorical programs often work with clients who are already integrated into the system.

- Many caseworkers said that their knowledge of social services in their communities exceeded the information available through BOSS. Some caseworkers added that they did not feel comfortable giving BOSS printouts to clients because they contained too much inaccurate information.

- Caseworkers were able to use the information they obtained through BOSS to represent the client to other agencies that questioned the eligibility of the client. The caseworkers also found it useful that BOSS provided information about the necessary documentation required for each program. This allowed them to help the client prepare for applications.

- BOSS/CROSSCheck brought technology to social workers and caseworkers who were previously computer illiterate and technophobic. Many of these individuals said that learning to use computer technology has completely changed the way they work.

- The most frequently used component of BOSS was the data feedback, but the agency representatives said that the data feedback mechanism would be even more useful if it was possible to manipulate the data.

Dissemination

The Children's Alliance made an effort to respond to requests for information about SafetyNet-NH that it received from other states and communities. Due to budget constraints, however, the Children's Alliance had to turn down many requests for presentations and information. It had not anticipated the strong national interest in the project and had not included funding for dissemination in its TIIAP grant proposal. Even if some money had been available, though, the staffing level may have also constrained the amount of dissemination that could have realistically been accomplished.

G. LESSONS LEARNED

Anticipate that Technology Will Change During the Life of a Project. One of the most significant lessons learned by the Children's Alliance during the demonstration project was the difficulty associated with meeting its original goals and objectives in a continuously evolving technical environment. Although the project was scheduled to last 18 months, the Children's Alliance had not budgeted for technology upgrades. In retrospect, it realized that it was "unrealistic to think that a DOS application and a dial-up distributive network would continue to muster support and confidence as web-enabled applications began to evolve and TCP/IP connections became the communication standard" (final report).

Need to Consider Most Effective Way of Serving Community Using Technology. Initially, the Children's Alliance and USHC ignored the need to link pilot sites to other community partners because they did not know how to do it, and the different agencies did not share information when the project started. They also did not have a good sense of where people entered the system. In retrospect, they realized that it would have been more useful to have 10 pilot sites in 1 community rather than having 10 communities with 1 pilot site. This may have helped the links between agencies become a reality earlier in the project. When the project first began, the Children's Alliance was thinking about using EDT for applications, not for creating a single file that would be accessed by multiple service providers. As the pilot sites started to express interest in sharing information, the goal of developing online applications had to be modified.

Need to Have Firm/Flexible Agreements From the Start. Additional lessons learned during the demonstration project involved project partners. First, contracts between the lead agency on the project and those supplying resources, either as a partner or vendor, must be firm and in writing. Second, as a project progresses, partners' original roles and reasons for being interested in the project may change. This may require a difficult reevaluation of the role of that partner, including considering whether the partner is still a partner. In addition, the lead agency always needs to specify timelines and deliverable dates.

The Children's Alliance also learned a couple lessons regarding design, staffing, scheduling, and budget. It found out that any system involving partners requires a system analysis of their needs, including the functionality of their software and their need for technical assistance. It would also help if someone involved in the project at the local level had some MIS knowledge.

Anticipate the Overall Role Grant Recipient Will Play and Hire Staff to Meet All Those Needs. The Children's Alliance felt its level of staffing throughout the project was good, but it needed a technical advisor. In addition, if the Children's Alliance wanted to participate in more meetings about statewide technology initiatives or do more dissemination about SafetyNet-NH, it would have needed additional personnel. As discussed previously, the project director's leadership role in working on statewide technology for community-based service providers affected the Children's Alliance's ability to conduct evaluations of the project.

Budget for Comprehensive Training for End Users. The Children's Alliance also learned how important it was to provide comprehensive training to end users. According to project staff, they only thought they needed to train users on the software package. They did not realize that they would also have to provide general computer training as well as spend time easing the fears of intake workers who were computer phobic. The Children's Alliance does not feel that it had enough resources slated for training.

Always Begin With an Equipment Assessment. In retrospect, the Children's Alliance advises other organizations contemplating a similar project to begin with an equipment assessment. The

organization will need adequate staffing to manage the project. In addition, the group will need a software developer who is well versed in the latest technology and future changes in the direction of technology.

Project Could Serve as a National Model if Certain Conditions Are Met. The New Hampshire project could serve as a national model. A similar project would need to have state support in order to promote community networks and be administered by a neutral party. It would need to have information systems that were outdated to help justify necessary changes or have a very stable information system. The project would also have to be able to survive a "hard and fast contracting process." The success of the project will depend on the project goals. A pragmatic grassroots movement also needs to be created to ensure broad-based support for the project. The project must also be able to withstand ambiguity and must remain flexible. It is also useful if the project has only one spokesperson.

H. FUTURE PLANS

Throughout New Hampshire, service providers and the New Hampshire Department of Health and Human Services are committed to building on the accomplishments made during the demonstration project. Funds have already been obtained from the Community Grant Program of the Health Care Transition Fund to fund the Technology Partnership. The Technology Partnership is in the process of developing data security measures and needed auditing functions for BOSS/CROSSCheck. The Community Grant Program is also providing funding to the regional networks to develop intranets that will support regional data sharing and coordination of efforts. Nets, the company established by a former USHC employee, is continuing to install and customize BOSS for community-based service providers across the state.

The Office of Community Services within the U.S. Department of Health and Human Services has also provided funding to identify the internal linkages needed to complete electronic applications for all the programs and services offered by Community Action Agencies. According to the Children's Alliance final report, these activities will allow New Hampshire to take advantage of information technologies to better aid the 44,000 low-income families currently served by the six Community Action Agencies of New Hampshire.

The project director, now at the Community Health Institute, will continue to work on the BOSS/CROSSCheck project as Project Director to the Technology Partnership. Her role will be to ensure that an information infrastructure is created that will link the community-based organizations to the data warehouse operated by the New Hampshire Department of Health and Human Services. When this linkage is realized, it will mark the beginning of statewide electronic data transfer and an end to the centralized system of applying for state-sponsored financial assistance.